



24850A

I hereby certify that this correspondence
is being deposited with the United
States Postal Service as First Class Mail in an
envelope addressed to: Assistant
Commissioner for Patents, Box AF,
Washington, D.C. 20231, on March 10, 2003.
s/ Jan Hostasa
Jan Hostasa

#10

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application

PAUL WARREN POOLE et al

Ser. No. 09/607,481

: Examiner: Miggins, Michael C.

Filed: June 30, 2000

: Group Art Unit: 1772

For: ACOUSTICAL AND THERMAL INSULATOR

RECEIVED
MAR 18 2003
TC 1700 MAIL ROOM

REQUEST FOR RECONSIDERATION

Assistant Commissioner
For Patents
Washington, DC 20231

Sir:

In response to the final Office Action dated October 21, 2002, Applicant respectfully requests reconsideration of the final rejection of all claims in the application on "obviousness" grounds.

Claim 1 reads upon an acoustical and thermal insulator comprising a multilayer composite including (a) a first facing material layer, (b) a polymer based blanket layer; and (c) an insulation insert encapsulated by the first facing material layer and the polymer based blanket layer. According to the express terms of this claim, the insulation insert is constructed from a material selected from the group consisting of fiberglass, foam, polymer based blanket material,

OKAY to
enter file
4/2/03

natural fiber based blanket material and combinations thereof.

The final rejection of this claim is based on the contention that the subject matter recited would have been obvious to a skilled artisan at the time the invention was made based on the combined teachings of two references: U.S. Patent No. 6,093,481 to Lynn et al. and U.S. Patent No. 4,985,106 to Nelson. While the Lynn et al. patent discloses an insulation "board" including facing and insulation layers, it is admitted that it does not teach or suggest in any manner the provision of an insulation insert of any material encapsulated by the first facing material layer and the polymer based blanket layer, as set forth and claimed in claim 1. The Examiner nevertheless seeks to rectify this significant shortcoming by citing to the Nelson patent, which relates to various constructions for insulation panels used in appliances to reduce the transmission of noise, vibration and heat. Specifically, the Examiner contends that Nelson's insulation panels include a vibration barrier or pad corresponding to Applicant's claimed insulation insert and, consequently, it *per se* suggests providing an insert in the insulation "board" disclosed in the Lynn et al. patent (final Office Action, p. 3, ¶ 2).

In response to Applicant's argument that the Examiner failed in the first Office Action to establish a suggestion in the Nelson patent or otherwise to combine the references and arrive at the claimed combination, the decision of *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981) is cited for the proposition that "the test [for obviousness] is what the combined teachings of the references would have suggested to those of ordinary skill in the art." Based on this "test," the Examiner posits that "one of ordinary skill in the art would clearly have been motivated to provide the insert of Nelson in the invention of Lynn et al. in order to

provide improved noise, vibration and heat insulation in a single insulation pad.” This suggestion is allegedly supplied by the Nelson patent, which mentions the insulator disclosed therein is an improvement over prior art insulators in these areas, but does not specifically attribute the improvement to any particular feature of the insulation (such as the vibration barrier or pad).

The flaw in this reasoning is that, even if Nelson teaches the desirability of using an insert in a different type of insulator and mentions that the resulting structure generally provides noise, vibration and heat insulation (which is a function of all insulators), this is not *objective evidence* of the suggestion to make the modification to the insulation board of the Lynn et al. patent and arrive at Applicant’s claimed invention. Rather, it is simply the recognition of the fact that, using the insert disclosed in the Nelson et al. patent results in an insulator having certain properties. The “improvement” provided does not mean, however, that providing an insert in any type of insulator, regardless of form, is suggested, as the Examiner seemingly contends. Moreover, it does not mean that one with knowledge of the insulator of the Lynn et al. patent would be motivated to include an insert therein, when in fact this reference, despite having been filed a decade after the Nelson patent issued, does not even contemplate the same. Simply put, neither reference provides any objective evidence of a suggestion that would lead one to make the combination that the Examiner proposes.

In the decision of *In re Fritch*, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992), the Federal Circuit overturned an Examiner’s determination regarding the obviousness of a claimed invention. In the course of doing so, it explained that:

[o]bviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. . . . *The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.*

Id. at 1784 (emphasis added). The highlighted point was further emphasized in the more recent decision of *In re Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002), in which the court held that the Board of Patent Appeals and Interferences improperly relied upon “common knowledge and common sense” of a person of ordinary skill in the art to find an invention obvious. Instead, the court emphasized the need for “*objective evidence*” on this point, as opposed to subjective speculation by the Examiner.

Here, the only evidence relied upon as establishing a “suggestion” to combine the teachings of the references is the mention in the Nelson patent of the desirability of providing an improved insulator with noise, vibration, and heat insulating capabilities. This “objectively” does not suggest the desirability of using an insert with the insulation board disclosed in the Lynn et al. patent. Stated another way, all the Nelson et al. patent teaches or suggests is using an insert in several specific types of insulators, none of which correspond to the one set forth in claim 1, and this is insufficient “objective” evidence to conclude that a skilled artisan would be motivated to use such an insert in the insulation board disclosed in the Lynn et al. patent. Rather, it is the Examiner’s subjective determination using hindsight based on the teachings of Applicant’s specification that, had one wanted to “improve” the resistance of the insulation board disclosed in the Lynn

et al. patent to noise, vibration, and heat in a single pad, then the obvious choice is the insert of the type shown in the Nelson et al. patent. This leap of logic is simply unsupported by the evidence of record, which means that the obviousness rejection of claim 1 simply cannot stand.

Indeed, in view of the crowded nature of the insulator art, it is no surprise that the Examiner is able to find all the elements of the claimed invention in different prior art references, since “virtually all [inventions] are combinations of old elements.” *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 U.S.P.Q. (BNA) 865, 870 (Fed. Cir. 1983). However, very few patents would ever issue if a simple showing of the various elements in the prior art was sufficient to negate patentability. This is precisely why the law requires the objective evidence of a suggestion of combining the teachings of the references, and, as demonstrated in the *Fritch* decision, *supra* and its progeny, the requirement is not taken lightly. See *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (“the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”). Accordingly, absent some objective evidence of a suggestion in the Nelson patent or otherwise to provide an insulation insert in the board of the Lynn et al. patent, the obviousness rejection of claim 1 must fail, as should the rejections of all claims that depend therefrom.

As for the other references cited, it is again emphasized that none teach or suggest the combination of elements set forth in claim 1 either. In accordance with the Examiner's comments, the Gluck et al. patent is cited for its disclosure of

a metallic foil reinforced with a fibrous scrim, a fibrous mat or a fibrous web consisting of glass fiber threads in a criss-cross pattern. The Gluck patent, however, fails in any manner to address the shortcoming noted above in the teachings of the primary reference to Lynn et al. and the secondary reference to Nelson that prevent that combination from forming a valid basis for the rejection of claim 1 from which claims 3-5 depend. Simply stated, even when considered in combination the cited and applied references fail to teach or suggest the claimed invention. The references simply do not lead one skilled in the art to provide an insulation insert of the material claimed encapsulated by a first facing material layer and a polymer based blanket layer.

The Nomizo et al. patent is cited for its disclosure of a compression molding process to control the density and hardness of specific regions of a product, in this case a seat cushion. The Nomizo et al. patent, like the Gluck et al. patent does not incorporate any form of insulation insert and, accordingly, it cannot provide the teachings missing from the Lynn et al. and Nelson patents noted above. Accordingly, this combination of references also fails to provide any appropriate basis for the rejection of claim 1 either. The combination of references simply does not teach or suggest the encapsulation of an insulation insert by a first facing material layer and a polymer based blanket layer as claimed.

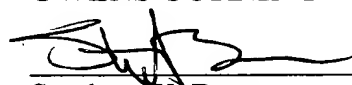
Finally, U.S. Patent 6,096,416 to Altenberg is cited for its disclosure of a facing layer including a scrim in an insulating panel for the purpose of providing improved mechanical properties and flame resistance. The Altenberg patent does not include any form of encapsulated insulation insert. Accordingly, the

Altenberg patent does not address the shortcomings noted above with respect to the combination of the Lynn et al. and Nelson patents. Thus, this proposed combination of references does not teach or suggest the provision of an acoustical or thermal insulator having an insulation insert encapsulated by a first facing material layer and a polymer based blanket layer as set forth in claim 1.

In summary, claim 1 patentably distinguishes over the each and every patent cited by the Examiner, whether considered alone or in combination, and therefore should be allowed. Consequently, the claims that depend from claim 1 should be allowed as well. Upon careful review and consideration it is believed the Examiner will agree with this proposition.

Accordingly, the early issuance of a formal Notice of Allowance is earnestly solicited. If any fees are required pertaining to this Request for Reconsideration, the Applicants request that they be charged to Deposit Account No. 50-0568.

Respectfully submitted,
OWENS CORNING



Stephen W. Barns
Reg. No. 38,037

Date: 7 Mar 2003
Owens Corning
Patent Dept., Bldg. 54
2790 Columbus Road
Granville, Ohio 43023
(740) 321-7162